

**BIOGRAPHICAL SKETCH**

NAME James Rabinowitz	POSITION TITLE Research Physicist		
eRA COMMONS USER NAME			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Alfred University, Alfred, NY	B.A.	1962	Physics
Uppsala University, Uppsala Sweden	Certificate	1969	Solid State Physics, Computational Chemistry and Theoretical Biology
State University of New York at Buffalo	Ph. D.	1972	Physics
Institute for Environmental Medicine, NYU Medical Center, Tuxedo, NY	Post Doc	1973	Environmental Medicine
Harvard School of Public Health, Continuing Education, Boston, MA		1994	Analyzing Risk: Science, Assessment and Management

**A. POSITIONS and HONORS****Research and Professional Experience:**

1968 -1972 Research Associate, Center for Theoretical Biology, State University of New York at Buffalo, Buffalo, NY.

1972 -1973 Postdoctoral Fellow, Institute of Environmental Medicine, New York University Medical Center, Tuxedo, NY.

1973 -1974 Guest Scientist, Northeast Radiological Health Laboratory, BRH/HEW/USPS, Winchester, MA.

1973 -1977 Associate Research Scientist, Institute of Environmental Medicine, New York University Medical Center, Tuxedo, NY.

1977 -1980 Research Scientist, Science and Technology Research Center, New York Institute of Technology, Dania, FL.

1980 -1983 Research Physicist, CBB, EBD, HERL, ORD, EPA, RTP, NC.

1983 -1995 Research Physicist, CMB, GTD, HERL, ORD, EPA, RTP, NC.

1991 -2000 Lecturer, Molecular Modeling Course, Department of Pharmaceutical Chemistry and Carolina Seminars Series, UNC, Chapel Hill, NC.

1995-2001 Research Physicist, BPB, ECD, NHEERL, ORD, EPA, RTP, NC.

2001-2005 Research Physicist, MTB, ECD, NHEERL, ORD, EPA, RTP, NC.

2005-present Research Physicist, NCCT, ORD, EPA, RTP, NC.

**Professional Societies and Affiliations:**

American Association for the Advancement of Science

International Society for Quantum Biology and Pharmacology

American Chemical Society; Section on Chemical Toxicology; Section on Computers in Chemistry

**Honors and Awards:**

Bronze Medal for Commendable Service, U.S. EPA, for Obtaining High Performance Computer Platforms for Environmental Research and Risk Assessment , 1992

Scientific and Technology Achievement Award, US EPA , 1985, 1997

Special Acts Award, NHEERL Supercomputing and High Performance Computing , 1997.

**Selected Invitations at National & International Symposia:**

Invited presenter and participant at GE program on alternative methods. Endocrine Disruption, Metabolism and Skin with the intent to look at new approaches to in vitro toxicity testing and how these approaches can be used to predict human health consequences. The Center for Alternatives to Animal Testing, Johns Hopkins Bloomberg School of Public Health, Baltimore Maryland 2007.

Invited speaker and participant at the ECVAM Workshop on Molecular Modelling Approaches for Human Hazard Assessment of Chemicals Feb.20-22, 2006 Ispra Italy.

Invited keynote speaker for the American Chemical Symposium -Molecular Modeling in Environmental Chemistry- sponsored by the Geological Chemistry of the ACS, with additional co-sponsors, Philadelphia, PA, 2004

Speaker at the American Chemical Society Symposium –Computational Toxicology- sponsored by the Chemical Toxicology Section. Cosponsored by the Computers in Chemistry Section, NY, NY –2003

Invited lecturer at the EURESCO Conference Computational Biophysics: Integrating Theoretical Physics and Biology, Biophysics from First Principles EURO Conference: From Electronic to the Mesoscale, European Science Foundation, San Feliu de Guixols, Spain –2002

Speaker Molecular Modeling Applications for Environmental Problems, Computers in Chemistry, American Chemical Society, New Orleans, LA –1996

Speaker Theoretical Calculations in Cancer Research: Progress and Perspectives, International Society of Quantum Chemistry and Pharmacology, St. Andrews, Scotland –1995.

**Selected Expert Committees/Advisory Panels/Organizing Committees:**

Organizing Committee International Science Forum on Computational Toxicology 2007

Organizer of American Chemical Society Symposium –Computational Toxicology- sponsored by the Chemical Toxicology Section. Cosponsored by the Computers in Chemistry Section, NY, NY –2003

Organizer and Chairman Symposium on Molecular Modeling Applications for Environmental Problems, Computers in Chemistry, American Chemical Society, New Orleans, LA –1996

Organizing Committee and Co-chairman Theoretical Calculations in Cancer Research: Progress and Perspectives, International Society of Quantum Chemistry and Pharmacology, St. Andrews, Scotland –1995.

Executive Committee of the International Society for Quantum Biology and Pharmacology. 1999 - 2002  
Reviewed research articles for various journals.

Reviewed Proposals for the Petroleum Research Fund, National Science Foundation and NIOSH since 1997  
Consultant on Research Project at the University of Rhode Island 2001-2004

**Selected Assistance/Advisory Support to the Agency:**

Initiated the Agency's participation in the U.S.-Poland Maria Sklodowska-Curie Fund for Research through consultation with the Agency's Office of International Affairs

Reviewer, Organobromine Waste Review for RCRA, Office of Solid Waste 1997

Member of the Working Group, Hazardous Waste Identification Rule, ORD for OSW. 1997-1998

Member of the Supercomputer Working Group (The name changed to the High Performance Computing Committee) 1990-present.

Member of the Endocrine Disrupter Research Implementation Plan Team 2000 -2003.

Member of the Scientific Office of the Future advisory committee and users group 2004 – 2006.

Member of NERL SP2 Steering Committee 2007

**B. SELECTED PUBLICATIONS**

L Lewis-Bevan, SB Little and Jr Rabinowitz (1995) Quantum Mechanical Studies of the Three Dimensional Structure of the Diol-epoxides of Benzo(c)Phenanthrene. Chemical Research in Toxicology 8, 499-505.

JR Rabinowitz, SB Little and EM Gifford (1998) The Interactions between Chlorinated Dioxins and a Positively Charged Molecular Probe: A New Molecular Interaction Potential, Journal of Computational Chemistry 19, 673 – 684.

SB Little, JR Rabinowitz, P Wei. and W Yang (1999) A comparison of calculated and experimental geometries for crowded polycyclic aromatic hydrocarbons and their metabolites, Polycyclic Aromatic Compounds 14, 53 – 61.

Principal Investigator/Program Director (Last, First, Middle): Rabinowitz, James R.

- DM Marini, ML Shelton MJ Kohan, EE Hudgens, TE Kleindienst, LM Ball, DB Walsh, JG de Boer, L Lewis-Bevan, JR Rabinowitz, LD Claxton, J Lewtas (2000) Mutagenicity in lung of big blue mice and induction of tandem-base substitutions in salmonella by the air pollutant peroxyacetyl nitrate (PAN): predicted formation of intrastrand cross-links, *Mutation Research* 457, 41 - 55.
- JR Rabinowitz, SB Little and KW Brown, (2001) Why does 5-methyl chrysene interact with DNA as both a planar and nonplanar polycyclic aromatic hydrocarbon, *International Journal of Quantum Chemistry* 88, 99 – 106.
- KW Brown, SB Little, JR Rabinowitz (2002) Benzo[a]pyrene and Benzo[c]phenanthrene: The effect of structure on the binding of water molecules to the diol epoxides, *Chemical Research in Toxicology* 15, 1069 – 1079.
- JR Rabinowitz, SB Little, EM Gifford (2004) Molecular Interaction Potentials for the development of structure activity relationships, In *Quantitative Structure-Activity Relationships for Pollution Prevention, Toxicological Screening, Risk Assessment and Web Applications*, Society of Environmental Toxicology and Chemistry, 93 – 104.